



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/617,713

07/14/2003

Yoshiaki Ohbayashi

030731

4191

23850

7590

11/17/2005

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

KANG, JULIANA K

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/617,713	<b>Applicant(s)</b> OHBAYASHI ET AL.	
	<b>Examiner</b> Juliana K. Kang	<b>Art Unit</b> 2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 2874

1. Applicant's communication filed on October 28, 2005 has been carefully studied by the Examiner. Applicant has canceled rejected claims to make the case allowable but in view of further consideration of the prior art, Yang et al (U.S. Patent 6,652,152 B2) that was discussed during the interview, however, a new rejection is applied to the pending claims. The late discovery of the newly applied reference is sincerely regretted. This action is not made final.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 4/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al and further in view of Suverison et al (U.S. Patent 4,993,803).

Yang et al disclose the claimed optical connector socket comprising a body (3) having a socket-side optical device (optoelectronic receiver or emitter, see column 3 line 1) installed therein and an insertion section to which a connected optical connector plug (31) is inserted, a cover that is covered on the body and has an opening section communicating with the insertion section, and a shutter operably and closable attached to the cover for closing the opening section and an elastic member that always elastically urges the shutter in a closing direction, wherein the opening section is set to have an outside dimension greater than the outside dimension of the optical connector

Art Unit: 2874

plug inserted into the cover and smaller than the outside dimension of the shutter.

However, Yang et al do not teach a guide projection provided at the inside of the insertion section of the body for guiding the inserted optical connector plug toward the socket-side optical device, wherein the guide projection becomes narrower toward the backside of the insertion section. Suverison et al teach an optical connector socket comprising guide rails (41) having narrower portions (53, stop) toward the backside of the insertion section to obtain a desired coupling location between the fiber end and the electro/optic device (see column 3 lines 29-40). Since Yang et al and Suverison et al are from the same field of endeavor, i.e. an optical connector socket coupling an optical fiber and optoelectronic device, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a guide projection that narrows toward the backside of the insertion section in Yang et al as taught by Suverison et al to provide a desired coupling distance between the optical fiber and the optoelectronic device.

4. Claims 2, 3, 4/2 and 4/3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al and further in view of Miyachi et al (U.S. Patent 6,767,138 B1)

Yang et al disclose the claimed optical connector socket comprising a body (3) having a socket-side optical device (optoelectronic receiver or emitter, see column 3 line 1) installed therein and an insertion section to which a connected optical connector plug (31) is inserted, a cover that is covered on the body and has an opening section communicating with the insertion section, and a shutter operably and closable attached

Art Unit: 2874

to the cover for closing the opening section and an elastic member that always elastically urges the shutter in a closing direction, wherein the opening section is set to have an outside dimension greater than the outside dimension of the optical connector plug inserted into the cover and smaller than the outside dimension of the shutter.

However, Yang et al do not teach a guide projection provided at the inside of the insertion section of the body for guiding the inserted optical connector plug toward the socket-side optical device, wherein the guide projection becomes narrower toward the backside of the insertion section. Miyachi et al teach an optical connector socket comprising latch arms (62, gets narrower toward the backside of the insertion section, see Fig.1) that guides and locks the connector plug (22) having a locking convex section (24) in place thus providing optimum coupling efficiency between the fiber and the optoelectronic device (72). Since Yang et al and Miyachi et al are from the same field of endeavor, i.e. an optical connector socket coupling an optical fiber and optoelectronic device, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a guide projection that narrows toward the backside of the insertion section in Yang et al as taught by Miyachi et al to provide optimum coupling efficiency between the optical fiber and the optoelectronic device.

### ***Response to Remarks***

5. Applicant's remarks with respect to claims 2-4 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliana K. Kang whose telephone number is (571) 272-2348. The examiner can normally be reached on Mon. & Fri. 10:00-6:00 and Tue. & Thur. 10:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JULIANA KANG  
PRIMARY EXAMINER**

*Juliana Kang*  
9/17/05